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Research Report 1258

EXTENSION TRAINING MATERIALS:
DIFFERENTIAL PERCEPTIONS AMONG USAREUR
LANCE MISSILE PERSONNEL

Raymond O. Waldkoetter and John R. Milligan

ARI FIELD UNIT, FORT SILL, OKLAHOMA

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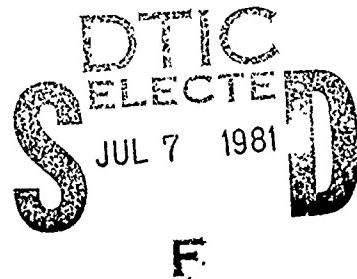
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Trng Extension Courses	Training Development	Resources
TEC		
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20. ABSTRACT *(Continue on reverse side if necessary and identify by block number)* Lance missile units in USAREUR were surveyed to determine the extent of extension training materials usage, preferred training modalities, training media mix and differential perceptions and usage of extension training materials among officer, NCO, and enlisted persons. Results indicated significant statistical differences among groups on numerous questions with definite preference and usage patterns for various extension training materials modalities.

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Raymond O. Waldkoetter and John R. Milligan

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In 1979 the Army Research Institute for the Behavioral and Social Sciences (ARI) was requested by the Field Artillery School (FAS), Fort Sill, to provide assistance in determining the usage characteristics of extension training materials (ETM) provided by the FAS to US Lance units in West Germany. ARI personnel from the Fort Sill Field Unit in cooperation with the FAS were given the objective of providing a data base to assist ETM planning by FAS as a portion of ARI's Performance-Oriented Skill Development and Evaluation research area. The advanced development research was done under Army Project 2Q263731A770.

The contents of this Technical Paper were presented at the 21st annual meeting of the Military Testing Association, October 1979.
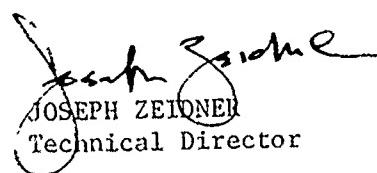
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EXTENSION TRAINING MATERIALS: DIFFERENTIAL PERCEPTIONS AMONG USAREUR
LANCE MISSILE PERSONNEL

BRIEF

Requirement:

To determine the extent of extension training materials (ETM) usage,
preferred training modalities, preferred media mix and appropriate allocation
of training resources among USAREUR Lance missile personnel. Differential
perceptions and data were sought to provide the basis for methodologies to
facilitate extension training programs.

Procedure:

Data were collected by use of written survey and structured interview of
personnel (N=323) in Army Lance units located in West Germany. Soldiers were
asked to provide their evaluation of extension training materials provided to
their unit, and the opportunity to use and actual usage of such materials.

Findings:

Item analysis of questionnaire responses and analysis of variance of
differences among groups were used in this research. Results clearly indicated
that for all groups (officer, NCO, EP) the most used and preferred form of
extension training material was Field Manuals/Soldiers Manuals and Technical
Manuals. On-the-job training and conventional non-TEC instruction were the
most common and preferred training method among Lance personnel. Training
extension courses (TEC) were reported by 60% of the enlisted personnel as
being used infrequently or never in their experience.

Utilization of Findings:

These findings were used by the Field Artillery School as the basis to
re-allocate budget expenditures for extension training materials in order
to achieve a media mix more appropriate to conditions in the field for Lance
personnel. The research implications of these findings strongly suggest the
need to re-evaluate the techniques for designing the extension training programs
in light of their curtailed utilization in a field or unit environment, so
that improved design procedures will insure standards of cost and training
effectiveness.

EXTENSION TRAINING MATERIALS: DIFFERENTIAL PERCEPTIONS AMONG USAREUR
LANCE MISSILE PERSONNEL

CONTENTS

LIST OF TABLES

EXTENSION TRAINING MATERIALS: DIFFERENTIAL PERCEPTIONS
AMONG USAREUR LANCE MISSILE PERSONNEL

INTRODUCTION

The US Army has made a substantial commitment to the reduction of formal
service school training in an effort to reduce the costs of personnel and
training which in many cases may be better performed at the unit level.
The reduction in training at MOS producing schools has been effected by the
utilization of extension training materials (ETM) which are training materials
developed to be used at the unit level by company grade officers and NCOs in
training personnel. In most cases this material is intended to be used to
keep the individual current and knowledgeable in both his individual military
occupation speciality (MOS) and general military subjects common to most MOS's.
The use of unit training with ETM in conjunction with supervised on-the-job
training is considered sufficient training to award many previously untrained
individuals an MOS based upon this type of training. Among the various ETM
available for unit training Training Extension Courses (TEC) represent the
most comprehensive attempt to provide a block of instruction as a complete
audio-visual package to be used by individual soldiers or in small-group settings.
Each TEC lesson costs approximately $15,920 (1975 dollars) to develop which
compared to conventional group instruction techniques is less expensive
(Temkin, Connelly, Marvin, Valdes and Caviness, 1975). This replacement of
conventional instruction by TEC was seen by Temkin et al as a considerable
savings in training costs.

Prior research (McCluskey and Tripp, 1975) demonstrated moderately positive
attitudes toward the use of training extension course (TEC) materials by
individual soldiers and a more favorable reception to TEC than the traditional
lecture method of instruction. Among the observations made by McCluskey and
Tripp as a result of their research were the following:

(1) The TEC system had not been implemented in the units for a sufficient
period of time to permit a fully adequate evaluation (1975).

(2) During the time period for the evaluation, there was not an adequate
library of lessons available for meaningful study in terms of either MOS
proficiency or the accomplishment of unit training goals. During the
February-March 1975 time frame, when the data was collected only 46 lessons
were available to field units.

(3) The results of the evaluation were probably biased since one
division sized unit accounted for approximately 80% of the total lesson
utilization surveyed.

(4) From September 1974 to February 1975, there was an increasing tendency
for TEC materials to be utilized in the group mode, during duty hours, and for
mandatory study.

(5) Command emphasis and information concerning the TEC system were
apparently reduced in content and importance during transmission down through
the chain of command.

(6) The attitudes of unit trainers and users toward the TEC system were moderately positive.

(7) The establishment of battalion-level TEC Learning Centers did not appear to be the most appropriate and effective level for distribution of TEC materials.

(8) During the evaluation, the research team made several observations concerning possible changes that might increase the utilization and efficiency of the TEC system. These observations were supported by relatively small groups (2-10) of personnel interviewed:

(a) Utilization might be increased by thoroughly promoting and demonstrating the TEC Program to Unit Training Officers and NCOs at the company level. This promotion might include a prototype unit training program that would demonstrate precisely how TEC materials could be applied in a unit environment.

(b) The utilization of the TEC Program in unit training might be increased if the allocation of TEC hardware and software were divided between battalion and company levels.

(c) The utilization of TEC materials for some of the classroom lecture instruction currently given in the units might be increased if the equipment had a projection capability for groups of 30 to 200 individuals.

(d) Utilization of the TEC system might be increased if the TEC Learning Centers had authorization for full-time personnel positions and operating budgets.

(e) Utilization of the TEC system might be increased with a system of rewards and incentives, such as the award of promotion points, for both the student and the unit trainer.

(f) The efficiency of the TEC maintenance system might be increased if three simple operating adjustments were decentralized to the battalion level.

A substantial amount of the data gathered by the authors of this paper five years later (Waldkoetter and Milligan, 1979), essentially supports the recommendations by McCluskey and Tripp (1975) and reflect the failure of the Army to adequately respond to those recommendations. Bennik, Hoyt and Butler (1978) addressed some of these problems by evaluating and suggesting media alternatives for training extension courses in the FY 78-83 time frame. Their findings included:

1. The need exists for: (a) closer attention to the characteristics of soldiers; (b) increased realism of delivery system components; (c) selection of techniques less demanding of costly resources; (d) closer integration in the choice of training delivery systems.

2

2. Life cycle management should include integrating system design with: (a) man-machine interface; (b) personnel selection or job assignment criteria; (c) EPMS/OPMS specialty and skill level structure.

3. Choices among the several training delivery systems potentially available in the FY 78-83 period should consider: (a) broadened exportability to include training delivery systems that can be embedded in a fielded weapon system or which can be accessed from a remote site; (b) established data files containing characteristics, operational status, accessibility, and constraints of training delivery systems.

4. TRADOC goals suggest that it is necessary to: (a) insure that course designers/developers possess the skills for selecting, developing and updating media and courseware for a variety of alternative delivery systems; (b) ensure that school system managers can specify procurement requirements as well as monitor and evaluate contractor plans and products; (c) collect and summarize data on training cost effectiveness to include user acceptance throughout the life cycle development of a system.

Mays, Holmgren, and Shelnutt (1979) in a more recent evaluation of usage patterns and factors found that only 50.2% of the soldier sample (N=3404) had used TEC and 35.3% had never heard of TEC. The Mays et.al. research revealed that the most often cited reasons for lack of use pertained to ignorance of TEC, unavailability of equipment, and lack of encouragement to use.

Knerr, Downey, and Kessler (1975) compared effectiveness of TEC to conventional instruction in a field experiement of both Active (N=285) and Reserve (N=215) Army components. Their results demonstrated that soldiers trained using TEC performed significantly higher on post tests than conventionally trained soldiers. A finding of interest in the research was that performance test scores were uncorrelated with General Technical (GT) aptitude scores for soldiers trained using TEC materials while soldiers trained by conventional instruction obtained performance scores which were correlated with their GT scores. This suggests the possibility that TEC can be used with a wide range of individuals with differing levels of preparedness for study. Among the most recent research is a study by Holmgren, Hilligross, Swezey and Eakins (1979), this research evaluated the effectiveness and retention of training extension courses in five subject areas, one common to all combat arms and one specific to each of the other combat arms. Using Active (N=635) and National Guard (N=539) component soldiers each subject area was divided into five experimental groups. Two of these groups received TEC instruction one with pre - and post-testing, the other without. Two other groups received conventional instruction, one with one without pre - and post-testing. The fifth experimental group received no instruction and served as a baseline for the other four groups. The results of this research demon-strated that the TEC trained soldiers performed better than the conventionally trained soldiers averaged across the five subject areas on both the initial and retention test.

The research cited above is representative of research in the area of exportable or extension training materials. Much of this research has focused upon TEC materials and has not addressed the other areas of extension training methods or materials. Although several studies have assessed usage and availability of materials there have been no follow-up studies to evaluate whether the recommendations made in earlier studies have been implemented or to evaluate whether the materials have been used with increasing frequency as the availability of materials increase at the unit level.

The research conducted by the authors in this study sought both qualitative and quantitative data on extension training at the unit level. Lance units located in Europe were selected due to their relative isolation and importance to the defense of Western Europe.

OBJECTIVE

The research reported here attempted to provide answers to three major areas of doubt regarding extension training materials and their use by Lance missile units. These areas of concern were (1) actual usage of materials and by whom (2) availability and suitability of materials including the training environment itself and (3) individual perceptions as to quality and desirability of the extension training program. It was hoped that meaningful answers to these three areas of inquiry would provide a basis for the re-allocation of training resources to more fully meet the needs of both the individual soldier and management needs of the Field Artillery School, the proponent agency for Field Artillery extension courses.

PROCEDURE

To accomplish the above research objective the authors used both written surveys and structured interviews of personnel (N=323) in US Army Lance units located in West Germany. This technique proved to be effective and efficient in accomplishing the research objective.

Sample. The researchers coordinated data gathering with all of the headquarters of six US Army Lance missile units available in the Federal Republic of West Germany (FRG). The data gathering was arranged so that all available soldiers of the surveyed units would complete the questionnaire in conjunction with scheduled unit training. Surveyed units were not asked to change any personnel or training schedules but simply provide a minimum number of unselected personnel to complete the survey. Although formal random sampling techniques were not used, the researchers were satisfied that no systematic bias in subject sampling was present. Analysis of the collected data with regards to rank, MOS and prior research confirmed the researchers observations. Of the individuals present less than 10 declined to complete the survey although a total of 30 questionnaires were excluded from the analysis due to incompleteness of responses leaving a sample of 323.

Research Instruments. The questionnaire used in this research was developed by the researchers in conjunction with representatives from the Field Artillery School. It is a factorially complex instrument whose psychometric characteristics are not of principal interest here and will be discussed in another report. The purpose of this report is to report descriptive responses to selected individual items rather than an analysis of the instrument itself. Appendix A to this report contains a copy of the questionnaire percentage responses for each item.

RESULTS

Inspection of item responses for 69, 74, and 44 on the last page of the questionnaire clearly indicates 96%, 95% and 85% of the respondents, respectively, thought that the "most avalable for use" materials are field manuals, technical manuals, and TEC programs. Frequency of use next

indicated that 42.2% used technical manuals "very often" on item 75, leading use of field manuals with 38% answering "very often" on item 70, with TEC programs given only a 2% "very often" frequency on item 45, then 11% answering "often" and 40% "occasionally". The "most infrequent use" was being made of television or closed circuit T.V. as noted by 73% (never), on item 50. Responses to the question of which media materials the respondents found most helpful in learning indicated that formal technical manuals were rated 37%, item 76, (extremely helpful) and field manuals 30%, item 71, (extremely helpful) with TEC programs rated at 12%, item 46 (extremely helpful).

Respondents to the question of quality of the extension materials provided the unit, felt again, that technical and field/soldiers manuals were of the highest quality in comparison to other media provided. Respondents to the question of the importance of various training materials in helping the individual learn and retain proficiency in his MOS reflected again the importance of field and technical manuals over other forms of information including TEC.

Comparison of the percentage of responses by rank are shown on Tables 1 and 2. These responses by rank of respondent (Enlisted, NCO and Officer) provide evidence as to differing perceptions of the utility of two selected media modes (TEC and TMs). Officers stated TEC was more available than that stated by the NCOs who in turn stated TEC was more available than the enlisted personnel. These differences between groups for the five selected questions dealing with TEC were all statistically significant beyond the .05 level suggesting substantial disagreement on the five TEC dimensions of availability, frequency of usage, job learning aid, quality, and importance. Of particular concern is the observation that 60% of the enlisted persons (EP) use TEC only infrequently or never, yet about 75% agree on TECs job learning importance.

Comparison of percent response by rank for the five questions dealing with technical manuals (TM) reveals statistically significant differences among groups on four of the five questions (substantial agreement among groups existed on the availability questions) but unlike the TEC differences the overall responses for all ranks rated TMs consistently higher on the dimensions of availability, usage, learning aid, quality and importance. This strongly suggests that TEC has a long way to go before it becomes as significant a job aid as TMs are currently to soldiers at unit level.

CONCLUSIONS

The questionnaire and interview results supported the findings of McCluskey and Tripp (1975) with the observation that those findings are still current for Lance missile units in the FRG. The recommendations in that report have not been implemented five years later. A major justification after implementing TEC and other forms of ETM has been its projected cost-effectiveness in replacing much of the conventional instruction at unit level and providing a supplement to MOS training. What the researchers

have found is that TEC is not replacing conventional instruction but
in some instances does serve as a little-used supplement to conventional
instruction. It appears to the researchers in this study that TEC has
added substantial costs to unit training rather than reducing those costs
and prior cost-effectiveness analyses are not currently accurate due to the
failure to implement the McCluskey and Tripp recommendations.

Table 1

Comparison of Percent Responses by Rank to
Training Extension Course (TEC) Questions

Availability of TEC

	Enlisted Persons	NCO	Officer
Yes	79.2	92.0	96.2
No	17.6	8.0	3.8
No Answer	3.1	0	0
Sample =	159	75	52
Missing Observations =	37		
Chi Square =	13.88	4d.f.	$p=.01$

Frequency of Using TEC in Training

	Enlisted Persons	NCO	Officer
Never	35.6	11.4	7.5
Infrequently	24.3	17.7	26.4
Occasionally	35.6	50.6	39.6
Often	4.5	19.0	18.9
Very Often	0	1.3	7.5
Sample Size =	177	79	53
Missing Observations =	14		
Chi Square =	54.17	8d.f.	$p=.001$

How Helpful is TEC in Your Learning

	Enlisted Persons	NCO	Officer
No help	14.9	9.0	2.0
Somewhat helpful	22.6	16.7	21.6
Helpful	37.5	33.3	43.1
Very helpful	12.5	30.8	19.6
Extremely helpful	12.5	10.3	13.7
Sample Size =	168	78	51
Missing Observations =	26		
Chi Square =	18.02	8d.f.	$p=.02$

8

Table 1 (Continued)

What is the Quality of TEC Provided Your Unit?			
	Enlisted Persons	NCO	Officer
Very poor	15.6	16.0	4.1
Poor	13.0	18.7	28.6
Satisfactory	39.0	24.0	20.4
Good	24.7	29.3	26.5
Excellent	7.8	12.0	20.4
Sample Size =	154	75	49
Missing Observations =	45		
Chi Square =	21.09	8d.f.	p=.01

Importance of TEC in Learning Your Job			
	Enlisted Persons	NCO	Officer
Not important	9.7	3.9	0
Slightly important	15.8	19.5	33.3
Moderately important	34.5	22.1	33.3
Very important	26.1	37.7	23.5
Extremely important	13.9	16.9	9.8
Sample Size =	165	77	51
Missing Observations =	30		
Chi Square =	19.68	8d.f.	p=.01

Table 2

Comparison of Percent Responses by Rank to Technical Manual (TM) Questions

Availability of TM			
	Enlisted Persons	NCO	Officer
Yes	95.2	94.8	96.2
No	3.6	5.2	3.8
No Answer	1.2	0	0
Sample Size =	165	77	53
Missing Observations =	28		
Chi Square =	1.91	4d.f.	p=.75

Frequency of Using TMs in Training			
	Enlisted Persons	NCO	Officer
Never	7.6	5.0	0
Infrequently	8.8	3.8	3.9
Occasionally	20.0	10.0	9.8
Often	32.4	30.0	21.6
Very Often	31.2	51.2	64.7
Sample Size =	170	80	51
Missing Observations =	22		
Chi Square =	25.85	8d.f.	p=.01

How Helpful are TMs in Your Learning?			
	Enlisted Persons	NCO	Officers
No help	1.8	2.6	0
Somewhat helped	15.2	1.3	5.9
Helpful	23.8	21.1	23.5
Very helpful	27.4	28.9	29.4
Extremely helpful	31.7	46.1	41.2
Sample Size =	164	76	51
Missing Observations =	32		
Chi Square =	15.81	8d.f.	p=.05

Table 2 (Continued)

Quality of TMs Provided to Your Unit

	Enlisted Persons	NCO	Officers
Very poor	7.0	2.8	1.9
Poor	6.3	15.:	17.3
Satisfactory	18.4	18.1	19.2
Good	36.1 .	30.6	44.2
Excellent	32.3	33.3	.7.3

Sample Size =	158	72	52
Missing Observations =	41		
Chi Square =	14.26	8d.f.	p=.08

Importance of TMs in Learning Your Job

	Enlisted Persons	NCO	Officers
Not important	2.4	0	0
Slightly important	9.6	6.4	17.6
Moderately important	18.0	11.5	7.8
Very important	31.1	30.8	31.4
Extremely important	38.9	51.3	53.1

Sample Size =	167	78	51
Missing Observations =	27		
Chi Square =	12.35	8d.f.	p=.14

11

Table 3

Comparison of Percent Responses by Rank to Having Ever
Used an Individualized Learning Center

	Enlisted Persons	NCO	Officer
Yes	54.1	70.0	63.5
No	45.9	27.5	34.0
Do not have one or no answer		2.5	1.9
Sample Size =	185	80	52
Missing Observations =	6		
Chi Square =	12.04	4d.f.	p=.02

REFERENCES

Bennik, F. D., Hoyt, W. G., & Butler, A. K. Determining TEC media
alternatives for field artillery individual-collective training
in FY 78-83 period. ARI Technical Report TR-78-A3, February 1978.
(AD A053 528)

Holmgren, J. E., Hilligross, R. E., Swezey, R. W., & Eakins, R. C.
Training effectiveness and retention of training extension course
(TEC) instruction in the combat arms. ARI Research Report 1208,
April 1979. (AD A069 942)

Knerr, C. S., Downey, R. G., & Kessler, J. J. Training individuals in
Army units: Comparative effectiveness of selected TEC lessons and
conventional methods. ARI Research Report 1188, December 1975.
(AD A022 034)

Mays, P. V., Holmgren, J. E., & Shelnutt, J. B. Current use, patterns
of use and factors affecting use of the Army training extension course
(TEC) program. ARI Technical Report TR-79-A3, April 1979. (AD A075 380)

McCluskey, M. R., & Tripp, J. M. An evaluation of the utilization,
maintenance, and perceived benefits of the training course (TEC)
(Tech. Rep. 75-18). Alexandria, VA: Human Resources Research
Organization, June 1975. (AD A015 006)

Temkin, S., Connolly, J. A., Marvin, M D., Valdes, A. L., and Caviness, J. A.
A cost assessment of Army training alternatives. ARI Research Problem
Review 75-3, August 1975. (AD A077 759)

Appendix

ANALYSIS OF TRAINING EXTENSION COURSE (TEC) MATERIAL

Purpose and Instructions for Questionnaire

The US Army Field Artillery School with the technical assistance of the Army Research Institute at Fort Sill is conducting research to improve the availability of appropriate extension training material (ETM) and make needed modifications to assist units and individuals in the field.

Your cooperation in completing this survey will greatly assist in that goal and have substantial benefit for the Army. Please give accurate answers and feel free to ask any person administering this questionnaire about any questions you do not understand.

We feel your experience and opinions are important for improving the training materials provided to you. Your name is not required on this form so feel free to answer the questions and provide comments in any way that you feel may be of help to us.

Kinds of ETM that you may be familiar with should serve as a basis for comparison or example. Those kinds you may have any questions about will assist in providing further comments or questions as you complete the questionnaire.

Interview discussion and comments on the questionnaire will definitely help the usefulness of your responses. Thank you for your participation.

SUMMARY OF QUESTIONNAIRE RESPONSES (PERCENTAGES)

TRAINING EXTENSION COURSE PROGRAM

- Extension Training Materials (ETM) Survey -

1. What is your primary MOS?_____

13A	10	15D	190
13B	43	82C	15
15K	12	Other MOS (9 or less) = 53	

TOTAL Sample = 323

2. Were you school trained for this MOS?

( ) yes   87.6
( ) no   10.8
No answer   1.5

3. How were you trained for your primary MOS?

( ) On-the-job training   9.3
( ) Correspondence course   .9
( ) Both of the above   1.9
( ) I don't know   5.2
( ) Other_____   82.7

4. Are you currently working in your primary MOS?

( ) yes   93.5
( ) no   6.2
No answer   .3

5. Is your unit a Lance or Pershing unit?

( ) Lance   99.4
( ) Pershing   .6 (Probable error in coding or random response by subject)

6. How many months have you had your primary MOS?

32.4 months (average)   25.3 months (median)   8.0 months (mode)

7. How many months have you been assigned to your present unit?

16.8 months (average)   13.3 months (median)   9.0 months (mode)

8. How many months have you had with this weapon system?

24.9 months (average)   20.7 months (median)   9.0 months (mode)

9. How many months have you been in the Army?

   56.4 months (average)   31.0 months (median)   12.0 months (mode)

10. Prior to coming into the Army what was the highest level of civilian
    education you completed?

    ( ) less than high school   17.6
    ( ) high school/GED   52.3
    ( ) 1 to 3 years of college   13.6
    ( ) 4 years with college degree   14.6
    ( ) 1 or more years graduate work at
        a university   .9
    ( ) no answer   .9

11. What is your current pay grade?

    57.6 Enlisted; 25.4 NCO; 15.8 Officer; .6 Warrant Officer; .6 no answer

12. Do you know the location of your battalion or battery MOS library
    or Individualized Learning Center?

    ( ) yes   94.7
    ( ) no   3.7
    ( ) we do not have one   .3
    ( ) no answer or do not know   1.2

13. Is the MOS library/Individualized Learning Center convenient in
    terms of location?

    ( ) yes   87.6
    ( ) no   5.6
    ( ) do not have one or don't know   6.8

14. Have you ever been to your battalion or battery MOS library or
    Individualized Learning Center to prepare yourself for an SQT or
    self-improvement?

    ( ) yes   58.5
    ( ) no   38.7
    ( ) do not have one   .9
    ( ) do not know   1.9

15. When is your MOS library or Individualized Learning Center open for
    use?

    ( ) duty hours only   21.7
    ( ) after duty hours only   1.5
    ( ) both during and after duty hours   53.6
    ( ) don't know or don't have one   23.2

16. Are you given time to utilize the MOS library and/or Individualized Learning Center?

```
( ) yes, during my duty hours if I request      48.6
( ) yes, but only during off duty time          31.6
( ) no, I am not given time to utilize the ctr  14.9
( ) do not have one                                .9
( ) no answer                                    4.0
```

17. How often during the month do you generally visit the MOS library or Individualized Learning Center?

```
( ) none                              46.4
( ) 1 to 5 times per month            44.0
( ) 6 to 10 times per month            4.3
( ) 11 to 15 times per month           1.2
( ) more than 15 times per month        .9
( ) no answer                          3.1
```

If you have an Individualized Learning Center and/or MOS library please rate on each of the following areas.

		Adequate	Inadequate	No answer Don't know
18.	Space to study	54.5	23.8	21.7
19.	Lighting	71.2	5.9	22.9
20.	Amount of materials available in your MOS	40.9	35.6	23.5
21.	Quietness and privacy for individual study	57.9	19.2	22.9
22.	Variety of training materials available in your MOS	39.6	36.8	23.5

23. Are materials available to you in the MOS library and/or Individualized Learning Center of the type which help you to do your job better?

```
( ) yes                                        65.6
( ) no                                         24.1
( ) do not nave one/no answer/don't know       10.2
```

24. Would you use an MOS library/Individualized Learning Center if it were available other than duty hours?

```
( ) quite often                 9.0
( ) frequently                 18.3
( ) usually                    25.5
( ) seldom                     31.6
( ) never                       6.5
( ) no answer                   6.2
```

18

25. How would you rate the available facilities for study using extension
training materials (ETM) (e.g., Library/Individualized Learning Center
dayroom, barracks, unit office, etc.)?

( ) quite satisfactory   7.7
( ) satisfactory   47.1
( ) not very satisfactory   20.7
( ) unsatisfactory but usable   13.9
( ) completely unsatisfactory   4.3

( ) no answer   6.2

26. Can you find specific extension training material (ETM) you need?

( ) quite often   7.1
( ) frequently   9.9
( ) usually   38.7
( ) seldom   24.8
( ) never   2.8
( ) don't know   16.7

27. How do you feel about the Lance or Pershing extension training
material (ETM) that you have used?

( ) like it very much   5.6
( ) like it   30.0
( ) like it slightly   21.4
( ) dislike it   8.0
( ) dislike it very much   1.2
( ) have never used it/don't know/   33.7
    or no answer

28. Instructions for taking available extension training material (ETM)
lessons are:

( ) very easy   15.5
( ) easy   36.2
( ) borderline   17.6
( ) difficult   2.8
( ) very difficult   1.2
( ) don't know/never used it/or no answer 26.6

29. The technical and procedural details provided by the ETM "to do the
job" are:

( ) very satisfactory   8.0
( ) satisfactory   46.4
( ) borderline   17.6
( ) unsatisfactory   3.4
( ) very unsatisfactory   1.2
( ) don't know/never used it/or no answer 23.2

30. How useful and applicable are Artillery branch ETM to your current duty position?

( ) extremely useful	7.1
( ) of considerable use	25.4
( ) of use	25.7
( ) not very useful	13.3
( ) of no use	5.0
( ) don't know/never used it/or no answer	23.5

31. How useful are the Army Correspondence Course Programs (ACCP) materials to you? (Answer only if you have taken one.)

( ) extremely useful	11.5
( ) of considerable use	15.8
( ) of use	16.7
( ) not very useful	5.6
( ) of no use	9.0
( ) don't know/never used them/or no answer	41.5

32. What type of <u>individual</u> job training is <u>MOST</u> applicable to your MOS?

( ) on-the-job training	46.7
( ) correspondence courses	1.2
( ) residence schools (such as attendance at Ft. Sill schools)	10.5
( ) TEC/videotape	1.9
( ) equipment or training manuals	6.8
( ) field training	9.0
( ) don't know/or no answer	23.8

33. What procedure for <u>unit</u> job training do you prefer?

( ) TEC/videotape	6.2
( ) correspondence courses	.6
( ) on-the-job training	41.2
( ) classroom instruction	7.1
( ) equipment or training manuals	7.4
( ) field training	10.5
( ) don't know/or no answer	26.9

34. Do the available extension training materials (ETM) effectively support the systems with which you work?

( ) very often	2.5
( ) often	11.8
( ) sometimes	35.0
( ) rarely	22.0
( ) never	7.1
( ) don't know/or no answer	21.7

35. What type of training will help MOST in preparing you for your SQT?

( ) TEC/videotape   5.3
( ) correspondence courses   .9
( ) on-the-job training   35.6
( ) FA schools   3.4
( ) equipment or training manuals   12.1
( ) field training   3.7
( ) don't know/or no answer   39.0

36. What type of training will help MOST in preparing you for your ARTEP?

( ) TEC/videotape   1.2
( ) correspondence courses   1.5
( ) on-the-job training   26.6
( ) FA schools   1.2
( ) equipment or training manuals   5.3
( ) field training   33.4
( ) don't know/or no answer   30.7

37. What type of training helps the LEAST in preparing you for your SQT?

( ) TEC/videotape   8.0
( ) correspondence courses   27.2
( ) on-the-job training   1.2
( ) FA schools   8.0
( ) equipment and training manuals   3.1
( ) field training   19.5
( ) don't know/or no answer   32.8

38. What type of training will help LEAST in preparing you for your ARTEP?

( ) TEC/videotape   16.4
( ) correspondence courses   31.6
( ) on-the-job training   .3
( ) FA schools   13.3
( ) equipment and training manuals   4.3
( ) field training   5.0
( ) don't know/or no answer   29.1

39. Extension training materials (ETM) help "cut down" on the amount of time to train for:

Individual duty MOS   23.8
Crew operations   11.5
Additional duty   13.3
SQT   19.8
ARTEP   1.9
Maintenance ONLY   5.3
Promotion/Reassignment   5.0
Field training   2.5
Don't know/or no answer   17.0

40. What conditions interfere <u>MOST</u> with availability of ETM?

Location	10.8
Duty time	28.8
Supervision	6.5
Interest	12.1
Security problems	.6
Scheduling	18.3
Distribution plan	5.3
Type of media	3.4
Don't know/or no answer	14.2

41. How can you <u>BEST</u> improve your <u>individual</u> proficiency? (List three in order of improtance:)

Individual study/manuals	33.7
Regular use of ETM lessons	7.4
Scheduled unit classes	9.9
Cross-training	20.1
Reassignment in unit	3.4
Resident TDY schooling	13.0
Field training	10.5
Don't know/or no answer	1.9

42. What kind of ETM will <u>BEST</u> increase job proficiency? (List three in order of importance:)

Text/job aids	18.9
Besseler Q/C	1.2
Training device/simulator	35.9
Audio tapes	4.3
Audio/video tapes	12.4
Field manuals/Soldier's manuals	12.4
Don't know/or no answer	14.8

43. How useful is ETM for your professional advancement?

( ) extremely useful	13.6
( ) of considerable use	25.7
( ) of use	31.3
( ) not very useful	8.0
( ) of no use	5.3
( ) don't know/or no answer	16.1

Lance

ETM PRODUCT & USAGE ANALYSIS

Extension training media materials and instruction modes	Are these materials or methods available to you for use?			How often do you use these in your training or that of your subordinates?					As a student what media/modes do you feel are the most helpful to your learning?					What is your opinion as to the quality of these items provided to you and your unit?						How important are these in helping the individual soldier learn and retain proficiency in his MOS?				
	YES	NO	DON'T KNOW	NEVER	INFREQUENTLY	OCCASIONALLY	OFTEN	VERY OFTEN	NO HELP	SOMEWHAT HELPFUL	HELPFUL	VERY HELPFUL	EXTREMELY HELPFUL	VERY POOR	POOR	SATISFACTORY	GOOD	EXCELLENT	NOT PROVIDED	NOT IMPORTANT	SLIGHTLY IMPORTANT	MODERATELY IMPORTANT	VERY IMPORTANT	EXTREMELY IMPORTANT
TEC Audio-Visual Programs	44. 85	13	2	45. 24	23	40	11	2	46. 11	21	38	18	12	47. 13	17	31	26	11	1	48. 7	20	31	29	14
Television	49. 40	56	4	50. 73	13	8	4	1	51. 34	19	28	11	9	52. 33	25	19	11	6	6	53. 26	21	24	15	14
Overhead Transparencies	54. 54	43	3	55. 59	19	16	5	1	56. 26	20	34	14	6	57. 26	23	28	13	4	5	58. 20	23	29	16	11
Programmed Texts	59. 62	33	5	60. 43	20	20	13	4	61. 16	17	36	19	11	62. 20	19	28	22	9	2	63. 8	18	32	28	14
Army Correspondence Course Program (ACCP) Material	64. 83	15	3	65. 50	20	17	11	2	66. 24	21	31	17	9	67. 14	17	27	27	12	3	68. 13	22	32	21	12
Field Manuals	69. 96	4	0	70. 6	7	18	32	38	71. 3	10	26	32	30	72. 4	11	20	35	28	1	73. 2	9	15	35	39
Technical Manuals	74. 95	4	1	75. 6	7	16	30	42	76. 2	10	23	28	37	77. 5	11	18	36	29	1	78. 1	10	15	31	43
Charts and Diagrams	79. 67	31	2	80. 25	18	27	19	11	81. 10	17	34	23	16	82. 15	19	26	25	14	2	83. 8	15	31	25	20

*Percentages rounded off to nearest whole number.

23

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